

Message Text

LIMITED OFFICIAL USE

PAGE 01 ROME 16478 01 OF 03 061717Z
ACTION EUR-12

INFO OCT-01 ISO-00 SOE-02 AID-05 CEA-01 CIAE-00
DODE-00 EB-08 H-01 INR-10 INT-05 L-03 NSAE-00
NSC-05 OMB-01 PM-05 ICA-11 OES-09 SP-02 SS-15
STR-07 TRSE-00 ACDA-12 PA-01 DOTE-00 NASA-01 /117 W
-----124371 061800Z /73

R 061557Z SEP 78
FM AMEMBASSY ROME
TO SECSTATE WASHDC 5599
INFO AMEMBASSY BONN
AMEMBASSY BRUSSELS
AMEMBASSY LONDON
AMEMBASSY PARIS
USDOE WASHDC
USDOC WASHDC

LIMITED OFFICIAL USE SECTION 1 OF 3 ROME 16478

DOE FOR ALBERT, ROBERTSON, BORRE, VANDERRY, IA

USED

E.O. 11652 N/A
TAGS: ENRG, TECH, IT
SUBJECT: U.S.-ITALY ENERGY COOPERATION: OVERALL PROSPECT FOR
NON-NUCLEAR TECHNOLOGIES AND SPECIFIC SUGGESTIONS
FOR ACTION

1. SUMMARY: SINCE THE LAST MEETING OF THE BILATERAL ENERGY
WORKING GROUP IN DECEMBER 1977, BILATERAL INITIATIVES IN NON-
NUCLEAR ENERGY TECHNOLOGIES HAVE MOVED FORWARD SIGNIFICANTLY,
ESPECIALLY WITH RESPECT TO SOLAR ENERGY, COAL, AND CONSER-
VATION. GEOTHERMAL COOPERATION CONTINUES TO BE FRUITFUL.
WITH CONTINUED EFFORTS ON BOTH SIDES, PROSPECTS FOR THE NEXT YEAR
ARE AS FOLLOWS: SOLAR WILL CONTINUE TO HOLD THE LIMELIGHT,
LIMITED OFFICIAL USE

LIMITED OFFICIAL USE

PAGE 02 ROME 16478 01 OF 03 061717Z

CONSERVATION WILL DEVELOP, AND GEOTHERMAL COOPERATION WILL RE-
MAIN ON A STEADY KEEL. IN THIS OVERALL REVIEW, THE MISSION IN-
CLUDES SPECIFIC SUGGESTIONS FOR DOE ACTION. END SUMMARY.

(1) SOLAR

2. THE VISIT OF AN ITALIAN SOLAR EXPERT GROUP TO THE U.S. FROM

SEPTEMBER 6-17 SHOULD PROVIDE CLEARER INDICATIONS OF WHAT SPECIFIC COOPERATIVE PROJECTS SHOULD BE FUNDED DURING FY 1970. FROM RECENT DISCUSSIONS HERE WITH ENGINEER SIMONI (WHO IS MOVING AS OF SEPTEMBER 1 FROM THE MFA TO THE MININD, WHERE HE WILL HEAD THE ENTIRE EFFORT FOR QTE SOFT UNQTE ENERGY TECHNOLOGIES), IT APPEARS THAT THE GOI WILL WANT APPROXIMATELY ONE-HALF OF THE 1.5 MILLION DLRS IN DOE FUNDS LABELLED FOR BILATERAL SOLAR CO-OPERATION TO BE SPENT IN THE FIRST YEAR ON PHOTOVOLTAIC PROJECTS.

3. IN PARTICULAR, THE GOI WOULD WELCOME DOE COOPERATION IN DESIGNING RURAL SOLAR INSTALLATIONS IN ITALY'S POORER REGIONS. IN ADDITION, THE ITALIANS WOULD LIKE TO PURCHASE U.S. ORIGIN PHOTOVOLTAIC CELLS. SIMONO HAS ASKED SCATT WHETHER IT MIGHT BE POSSIBLE TO DO THIS WITH DOE FUNDS. WE HAVE POINTED OUT THAT THE MONEY WILL NOT GO FAR IN PURCHASING HARDWARE, BUT THAT IF GOI COULD OBTAIN PHOTOVOLTAICS AT THE PRICE PAID BY THE USG THIS MIGHT BRING, BECAUSE OF OUR VOLUME BUYING, A SIGNIFICANT SAVINGS. ACTIONS REQUESTED: THAT APPROPRIATE DOE OFFICIALS BE PREPARED TO DISCUSS WITH SIMONI WHETHER THE USG PURCHASE PRICE IS SIGNIFICANTLY BELOW WHAT GOI WOULD BE LIKELY TO PAY FOR MUCH SMALLER QUANTITIES OF PHOTOVOLTAICS AS WELL AS WHETHER THERE ARE WAYS THE GOI MIGHT BE ABLE TO OBTAIN PHOTOVOLTAICS AT THE USG PRICE.

4. BESIDES PHOTOVOLTAICS, WE THINK IT LIKELY THAT THE ITALIANS WILL BRING FORTH DURING THE SEPTEMBER VISIT TWO OTHER PROJECTS LIMITED OFFICIAL USE

LIMITED OFFICIAL USE

PAGE 03 ROME 16478 01 OF 03 061717Z

WITH WHICH DOE IS ALREADY SOMEWHAT FAMILIAR: A 5MW SOLAR-ASSISTED GASTURBINE (NEI) AND A QTE HYBRID SOLAR TOTAL ENERGY SYSTEM UNQTE PROPOSED BY PROF. VISENTIN OF THE UNIVERSITY OF CALABRIA. WE HAVE POUCHED TO ROBERTSON AND ALBERT OF DOE COPIES OF VISENTIN'S LATEST PROPOSAL, WHICH INCLUDES THREE WIND GENERATORS (3KW PEAK ELECTRIC), PARABOLIC TROUGHS PRODUCING 80-250 CENTIGRADES OF HEAT (WITH CAPACITY 600KW PEAK THERMAL), PHOTOVOLTAICS (30KW PEAK ELECTRIC), AND STORAGE.

5. THE EMBASSY WILL HOST A THREE DAY MITRE CORPORATION SEMINAR ON SOLAR ENERGY FOR INTERESTED ITALIAN FIRMS IN LATE NOVEMBER 1978. THIS USDOC-SUPPORTED WILL BE PART OF OUR CONTINUING EFFORT TO FAMILIARIZE ITALIAN ENGINEERS AND COMPANIES WITH U.S. SOLAR PRODUCTS AND R AND D.

(2) COAL

6. THE ITALIANS HAVE LITTLE COAL R AND D. DURING THE SEPTEMBER VISIT THEY WILL BE MUCH BETTER PREPARED THAN PREVIOUSLY TO GIVE DOE A CLEAR CONCEPTION OF COAL-RELATED PLANS OF EACH OF THE ORGANIZATIONS REPRESENTED, ALL OF WHICH HAVE COMMERCIAL INTEREST IN COAL. DOE AND USDOC, WE BELIEVE, REGARD THESE ORGANIZATIONS AS

POTENTIAL CUSTOMERS FOR ADVANCED COAL TECHNOLOGIES UNDER DEVELOPMENT IN THE U.S.

7. IN ADDITION, THERE ARE TWO CONCRETE WAYS IN WHICH DOE MIGHT BE ABLE TO ASSIST THE ITALIANS IN UTILIZING MORE COAL. FIRST, DOE MIGHT RUN TESTS ON ITALY'S HIGH-ASH,

LIMITED OFFICIAL USE

NNN

LIMITED OFFICIAL USE

PAGE 01 ROME 16478 02 OF 03 061727Z
ACTION EUR-12

INFO OCT-01 ISO-00 SOE-02 AID-05 CEA-01 CIAE-00
DODE-00 EB-08 H-01 INR-10 INT-05 L-03 NSAE-00
NSC-05 OMB-01 PM-05 ICA-11 OES-09 SP-02 SS-15
STR-07 TRSE-00 ACDA-12 PA-01 DOTE-00 NASA-01 /117 W
-----124473 061801Z /73

R 061557Z SEP 78
FM AMEMBASSY ROME
TO SECSTATE WASHDC 5600
INFO AMEMBASSY BONN
AMEMBASSY BRUSSELS
AMEMBASSY LONDON
AMEMBASSY PARIS
USDOE WASHDC
USDOC WASHDC

LIMITED OFFICIAL USE SECTION 2 OF 3 ROME 16478

HIGH-SULFUR, LOW HEAT CONTENT SARDINIAN COAL AT SOME OF ITS PILOT PLANTS, THUS GIVING THE ITALIANS A CLEARER NOTION OF WHICH COMBUSTION GASIFICATION OR LIQUEFACTION PROCESS MAY IN THE FUTURE PROVE USEFUL TO THEM. THIS NOTION HAS BEEN DISCUSSED WITHIN DOE, BUT SO FAR AS WE ARE AWARE IT HAS NOT BEEN MENTIONED TO THE ITALIANS. ACTIONS REQUESTED: THAT SUCH QTE TEST RUNS UNQTE BE DISCUSSED WITH THE ITALIAN COAL EXPERTS IN SEPTEMBER AND THAT IF APPROPRIATE A PROPOSAL BE PREPARED.

8. SECOND, THE ITALIANS WILL BE SEEKING SOME ASSISTANCE IN THE LOGISTICS OF COAL TRANSPORTATION IN ITALY PROBABLY THE LIMITING FACTOR IN DETERMINING FUTURE COAL USE. AS WE UNDERSTAND IT, THE ITALIAN INTEREST WILL NOT BE IN HARDWARE BUT IN ANALYSIS, PLANNING AND MANAGEMENT TECHNIQUES. WE SUSPECT THAT AN INVITATION FOR TWO OR THREE ITALIANS TO WORK FOR SEVERAL MONTHS WITH AN APPROPRIATE DOE LAB WOULD BE A REASONABLE RESPONSE

TO ITALIAN NEEDS IN THIS AREA. ACTION REQUESTED: DOE DISCUSSION
LIMITED OFFICIAL USE

LIMITED OFFICIAL USE

PAGE 02 ROME 16478 02 OF 03 061727Z

WITH THE ITALIANS IN SEPTEMBER AS TO HOW WE MAY BE ABLE TO
ASSIST WITH COAL LOGISTICS.

(3) CONSERVATION

9. WE EXPECT THIS AREA TO EXPAND IN INTEREST DURING THE NEXT YEAR.
IT IS THE ONE AREA OTHER THAN GEOTHERMAL IN WHICH BILATERAL CO-
OPERATION HAS BEEN GROWING SPONTANEOUSLY (I.E., WITHOUT A POLITI-
CAL PUSH), AND WE REGARD THIS TYPE OF GROWTH AS AN INDICATION
THAT BOTH SIDES ARE FINDING SUFFICIENT RETURNS TO MERIT THEIR
RESPECTIVE INVESTMENTS
A. INDUSTRIAL AND UTILITY CONSERVATION.

10. MEDITERRANEAN BASIN ENERGY CONSERVATION TECHNOLOGY EXHIBITION
AND CONFERENCE AT THE U.S. TRADE CENTER IN MILAN, MARCH 26-30,
1979 (SEE STATE 150425, ROME 14078).
THE MISSION BELIEVES THAT THE EXHIBITION, PREPARED USDOC IN
COOPERATION WITH DOE, IS A GOOD OPPORTUNITY FOR BILATERAL
CONSULTATIONS ON INDUSTRIAL AND COMMERCIAL CONSERVATION TECH-
NOLOGIES. BEFORE WE CAN UNDERTAKE ANY DETAILED PLANNING, HOW-
EVER, WE MUST HAVE A CLEAR INDICATION OF USDOC'S PLANS. IT IS OUR
HOPE THAT THE CONFERENCE WILL INCLUDE KEY USG AND GOI PARTICI-
PANTS. ACTION REQUESTED: PLEASE INFORM IF DOE DEPUTY ASSISTANT
SECRETARY DOUG HARVEY WOULD BE AVAILABLE TO GIVE A KEYNOTE
ADDRESS IN MILAN.

11. USDOC DOE SURVEY OF ITALIAN ENERGY EFFICIENT TECHNOLOGIES
(STATE 215420/1)

USDOC AND DOE ARE COMMISSIONING SUCH STUDIES THROUGHOUT WESTERN
EUROPE IN ORDER TO STIMULATE INTEREST BY U.S. INDUSTRIAL USERS
AND PRODUCERS OF ENERGY EFFICIENT PRODUCTS AND TECHNOLOGIES.
BIDS ARE DUE BY SEPTEMBER 13 FOR STUDIES TO BE COMPLETED BY
LIMITED OFFICIAL USE

LIMITED OFFICIAL USE

PAGE 03 ROME 16478 02 OF 03 061727Z

JANUARY 8, 1979.

12. FIRST INTERNATIONAL CONFERENCE ON INDUSTRIAL MUNICIPAL
RESOURCE RECOVERY AND UTILIZATION COMPLEXES, DETROIT, FALL
1979 (STATE 216918)
THIS USDOC CONFERENCE WILL HOPEFULLY PROVIDE AN OPPORTUNITY FOR
ITALY TO SHOW OFF ITS USE OF MUNICIPAL REFUSE FOR GENERATING
HEAT AND POWER AS WELL AS FOR KEY ITALIANS TO LEARN ABOUT U.S.

TECHNOLOGIES. THE MISSION THEREFORE WELCOMES THE OCTOBER 16-
NOVEMBER 1, 1978 VISIT OF THE RESPONSIBLE USDOC OFFICIALS.

13. DOE/ENEL BILATERAL COOPERATION ON ULTRA HIGH VOLTAGE
TRANSMISSION.

ENEL (THE ITALIAN NATIONAL UTILITY) STILL AWAITS A
DOE REPLY TO THE PROPOSAL FOR COOPERATION IN THIS AREA. SCIATT
HAS RECENTLY POUCHED A DESCRIPTION OF THE NEL ONE-MILLION VOLT
PROJECT TO VANDERRYN, DOE. THE ITALIANS HAVE CLEARLY MADE A
SUBSTANTIAL COMMITMENT TO THIS PROJECT. THERE HAVE BEEN ONLY
MINIMAL BILATERAL EXCHANGES ON THE SUBJECT, THOUGH THESE HAVE
INCLUDED SOME TESTING OF INSULATORS AT EPRI AND AT CESI IN
MILAN. ACTION REQUESTED: REPLY TO THE LONG-STANDING ENEL
PROPSAL FOR COOPERATION.

B. BUILDINGS AND COMMUNITY SYSTEMS.

14. BOLOGNA ENERGY CONSERVATION AND BUILDING ENDUSTRY EXHIBITION,
OCTOBER 1979 (ROME 4751, ROME 12158, ROME 14071).

DOE HAS EXPRESSED INTEREST IN STAGING A NONCOMMERICAL EXHIBIT
OF CONSERVATION AND SOLAR TECHNOLOGIEIS FOR BUILDINGS AT THE
INTERNATIONAL EXHIBITION OF BUILDING INDUSTRIALIZATION. THE
EXHIBITION WOULD CONSIST OF A DISPLAY ILLUSTRATING U.S.
TECHNOLOGY, A BOOK AND A SERIES OF LECTURES. COSTS WOULD BE
SHARED BETWEEN THE ITALIANS AND THE USG. THE MISSION WOULD
REGARD THIS EXHIBITION AS A GOOD OPPORTUNITY FOR FORTHER

LIMITED OFFICIAL USE

NNN

LIMITED OFFICIAL USE

PAGE 01 ROME 16478 03 OF 03 061736Z
ACTION EUR-12

INFO OCT-01 ISO-00 SOE-02 AID-05 CEA-01 CIAE-00
DODE-00 EB-08 H-01 INR-10 INT-05 L-03 NSAE-00
NSC-05 OMB-01 PM-05 ICA-11 OES-09 SP-02 SS-15
STR-07 TRSE-00 ACDA-12 PA-01 DOTE-00 NASA-01 /117 W
-----124529 061828Z /73

R 061557Z SEP 78
FM AMEMBASSY ROME
TO SECSTATE WASHDC 5601
INFO AMEMBASSY BONN
AMEMBASSY BRUSSELS
AMEMBASSY LONDON
AMEMBASSY PARIS
USDOE WASHDC
USDOC WASHDC

LIMITED OFFICIAL USE SECTION 3 OF 3 ROME 16478

BILATERAL CONSULTATIONS ON SOLAR AND CONSERVATION TECHNOLOGIES IN BUILDINGS. ACTION REQUESTED: PLEASE INFORM OF PRESENT STATUS OF THE DISCUSSIONS BETWEEN DOE (MAINLY CHIOGIOJI) AND THE FAIR ORGANIZERS.

15. TOTEM (ROME 13977)

THIS FIAT-DESIGNED TOTAL ENRGY MODULE (ELECTRICITY AND HEAT) IS A STATIONARY INTERNAL COMBUSTION ENGINE (FROM A FIAT 127) THAT CAN RUN ON PETROL OR ON METHANE. DOE (GERRY LEIGHTON) IS JOINTLY FUNDING WITH FIAT A MARKET STUDY WITH A VIEW TOWARD UNDERTAKING A DEMSTRATION PROJECT IN 1979.

16. UNIVERSITY OF PALERMO-LAWRENCE BERKLEY LAB INFORMATION
THESE TWO INSTUTIONS EXCHANGE ON THE SUBJECT OF COMMUNITY SYSTEMS.
THIS EFFORT GROWS OUT OF CONTACTS BETWEEN U.S. RESEARCH WORKERS AND PROFESSOR ELIAS.

LIMITED OFFICIAL USE

LIMITED OFFICIAL USE

PAGE 02 ROME 16478 03 OF 03 061736Z

C. TRANSPORTATION

17. DOE, THROUGH NASA'S JET PROPULSION LABROATORY, IS NEGOTIATING A PHASE I CONTRACT (APPROXIMATELY 350,000 DLRS) FOR THE DESIGN OF A HYBIRD (ELECTRIC/GASOLINE OR DIESEL) AUTOMOBILE DURING THE NEXT YEAR. THE AUTOMOBILE IS TO CARRY AT LEAST FIVE PASSENGERS, MEET U.S. SAFETY AND EMISSION STANDARDS, USE TECHNOLOGIES CAPABLE OF MASS PRODUCTION AND EITHER GASOLINE OR DIESEL FUEL. ACTION REQUESTED: AS PREVIOUSLY REQUESTED (ROME 15083), PLEASE ADVISE THAT FIAT PLANS TO DO FOR THIS PHASE I EFFORT AS WELL AS ANY FUTURE DEVELOPMENTS ON THIS PROJECT.

(4) GEOTHERMAL.

A. DOE/ENEL AGREEMENT

18. IT IS OUR UNDERSARDANIG THAT MOST AREAS UNDER THI AGREEMENT CNONTINUE SATISFACTORILY, BUT THAT A T THE OMENT SEVERAL ITEMS ARE AWAITING DOE ACTION, INCLUUDING A PROPOSAL FOR WELL STIMULATION FROM CERON (HEAD OF ENEL'S INSTITUTE AT PISA), TWO PROPOSALS FOR UTILIZATION OF HOT BRINES FROM ALLEGGRINI (THE ITALIAN COORDINATOR FOR THIS AREA), SEVERAL PROPOSALS FOR EXTENDING THE ALREADY SIGNIFICANT WORK ON RESERVOIR ENGINEERING, AND ENVIRONMENTAL STUDIES OF THEALTH IPACTS AT LARDERELLO AND OF MICROEARTHQUAKES. ACTION REQUESTED: DOE EFFORTS TO EXPEDITE DECISIONS ON THESE PROPOSALS.

B. CNR/ENEL/DOE AGREEMENT FOR INFORMATION EXCHANGE.

19. THE LATEST DETAILED INFORMATION WE HAVE ON THE INFORMATION EXCHANGE IS THE REPORT OF THE JULY 6, 1977 MEETING IN WASING-

TON. IN JULY 1978, THE ITALIANS HELD AN INFORMATION MEETING
IN PISA ON THEIR GEOTHERMAL DATA BANK.
C. TESTS OF ADVANCED GEOTHERMAL EQUIPMENT.

LIMITED OFFICIAL USE

LIMITED OFFICIAL USE

PAGE 03 ROME 16478 03 OF 03 061736Z

20 ENEL HAS CONFIRMED TO THE IEA ITS INTENTION TO INSTALL AND TEST
AT CESANO THE 1.2 MW HELICAL SCREW GENERATOR MADE AVAILABLE BY
DOE AND IEA MEMBERS. AN ITALIAN PROPOSAL WAS SUBMITTED TO DOE
(MANSOUR, ET) IN JULY 1978. PREPARATION OF THE SITE AND DESIGN
WORK ARE TO BE COMPLETED BY THE END OF 1978; THE GENERATOR WOULD
BE OPERATIONAL BY EARLY 1980 AND WOULD BE TESTED FOR THREE MONTHS.
THE ITALIAN BUDGET FOR THIS ACTIVITY (WHICH DOES NOT INCLUDE THE
COST OF THE GENERATOR ITSELF) IS ABOUT 500,000 DLRS.

21. THE ITALIANS WOULD ALSO LIKE TO TEST A U.S. DESIGNED
FLUIDIZED BED HEAD EXCHANGER. LAST WE HEARD, ENEL WAS STILL
WAITING FOR THE DESIGNS OF THIS HEAT EXCHANGER SO THAT IT COULD
BE BUILT IN ITALY.

22. DOE APPEARS TO OWN ENEL REPLIES ON BOTH THE GENERATOR AND
THE HEAT EXCHANGER. ACTION REQUESTED: PLEASE INFORM US OF
DOE'S RESPONSES TO THE ITALIANS. HOLMES

LIMITED OFFICIAL USE

NNN

Message Attributes

Automatic Decaptioning: X
Capture Date: 01 jan 1994
Channel Indicators: n/a
Current Classification: UNCLASSIFIED
Concepts: NUCLEAR ENERGY, TECHNOLOGICAL EXCHANGES, INTERGOVERNMENTAL COOPERATION, PROGRAMS (PROJECTS)
Control Number: n/a
Copy: SINGLE
Draft Date: 06 sep 1978
Decaption Date: 01 jan 1960
Decaption Note:
Disposition Action: RELEASED
Disposition Approved on Date:
Disposition Case Number: n/a
Disposition Comment: 25 YEAR REVIEW
Disposition Date: 20 Mar 2014
Disposition Event:
Disposition History: n/a
Disposition Reason:
Disposition Remarks:
Document Number: 1978ROME16478
Document Source: CORE
Document Unique ID: 00
Drafter: n/a
Enclosure: n/a
Executive Order: N/A
Errors: N/A
Expiration:
Film Number: D780363-0261
Format: TEL
From: ROME
Handling Restrictions: n/a
Image Path:
ISecure: 1
Legacy Key: link1978/newtext/t19780998/aaaadcwt.tel
Line Count: 359
Litigation Code IDs:
Litigation Codes:
Litigation History:
Locator: TEXT ON-LINE, ON MICROFILM
Message ID: 9874fa56-c288-dd11-92da-001cc4696bcc
Office: ACTION EUR
Original Classification: LIMITED OFFICIAL USE
Original Handling Restrictions: n/a
Original Previous Classification: n/a
Original Previous Handling Restrictions: n/a
Page Count: 7
Previous Channel Indicators: n/a
Previous Classification: LIMITED OFFICIAL USE
Previous Handling Restrictions: n/a
Reference: n/a
Retention: 0
Review Action: RELEASED, APPROVED
Review Content Flags:
Review Date: 05 may 2005
Review Event:
Review Exemptions: n/a
Review Media Identifier:
Review Release Date: N/A
Review Release Event: n/a
Review Transfer Date:
Review Withdrawn Fields: n/a
SAS ID: 1530735
Secure: OPEN
Status: NATIVE
Subject: U.S.-ITALY ENERGY COOPERATION: OVERALL PROSPECT FOR NON-NUCLEAR TECHNOLOGIES AND SPECIFIC SUGGESTIONS FOR ACTION
TAGS: ENRG, TECH, IT, US
To: STATE USEEC
Type: TE
vdkgvwkey: odbc://SAS/SAS.dbo.SAS_Docs/9874fa56-c288-dd11-92da-001cc4696bcc
Review Markings:
Sheryl P. Walter
Declassified/Released
US Department of State
EO Systematic Review
20 Mar 2014
Markings: Sheryl P. Walter Declassified/Released US Department of State EO Systematic Review 20 Mar 2014